CLAIMS

1. (Original) A filter device comprising a housing, said housing enclosing at least two fluid filtration compartments, each filtration compartment comprising at least one filter membrane having a first surface and a second surface, said first surface of each filter membrane being in fluid communication with at least one fluid flow port, said second surface being in fluid communication with at least one fluid flow port, adjacent filtration compartments being separated from each other by an internal wall, said housing comprising at least two longitudinally extending shell portions, one of said longitudinally extending shell portions of the housing describing less than one half of the perimeter of said housing.

2. (Original) The filter device of Claim 1 wherein the one of said longitudinally extending shell portions describes less than one third of the perimeter of said housing.

3. (Original) The filter device of Claim 2 wherein the one of said longitudinally extending shell portions describes less than one quarter of the perimeter of said housing.

4. (Original) The filter device of Claim 1 wherein said housing is tubular.

5. (Original) The filter device of Claim 4 wherein said perimeter of said housing is a circumference.

6. (Currently Amended) The filter device of claim 1 wherein said longitudinally extending shell portions are joined together along ~~one or more~~ at least two longitudinal ~~seam~~ seams.

7. (Withdrawn) The filter device of Claim 1, wherein at least one filtration compartment comprises at least two spaced apart generally planar walls and said walls are in a parallel relationship to each other.

8. (Withdrawn) The filter device of Claim 7 wherein each filtration compartment comprises at least two spaced apart generally parallel walls and said walls are in a parallel relationship with each other.

9. (Withdrawn) The filter device of Claim 8 wherein said filter device comprises three filtration compartments.

10. (Original) The filter device of Claim 1, wherein said internal wall comprises a first part and a second part, said first part being attached to a first longitudinally extending shell portion and said second part being attached to a second longitudinally extending shell portion, said first part having a free edge and said second part having a free edge, said free edges being configured to join to each other.

11. (Original) The filter device of Claim 10, wherein each longitudinally extending shell portions has two longitudinal edges, the longitudinal edges of adjacent shell portions being configured to join to each other, and wherein the free edge of a wall part attached to a shell portion is not co-planar with the longitudinal edges of said shell portion.

12. (Original) The filter device of claim 11 wherein a larger one of said longitudinally extending shell portions of the housing describes more than one half of the perimeter of said housing and wherein said free edge of said wall part attached to said larger shell portion extends beyond a plane containing said longitudinal edges of said larger shell portion.

13. (Withdrawn) The filter device of Claim 1 wherein one of said longitudinally extending shell portions comprises a substantially clear, uncoloured material at at least a boundary thereof and wherein another of said longitudinally extending shell portions comprises a coloured material at at least a boundary of said another shell portion, whereby a laser or electromagnetic radiation weld may be formed between the boundaries of said shell portions.

14. (Original) The filter device of Claim 1 wherein one of said longitudinally extending shell portions has a first refractive index and another of said longitudinally extending shell portions

has a second refractive index, said first refractive index being different from said second refractive index.

15. (Original) The filter device of Claim 14 wherein said one of said longitudinally extending shell portions is comprised of polycarbonate and said another of said longitudinally extending shell portions is comprised of polypropylene.

16. (Original) The filter device of Claim 1, comprising two filtration compartments arranged within said housing and wherein one of said filtration compartments is suitable for carrying out ultrafiltration of a first fluid while the other compartment is suitable for simultaneously carrying out either haemofiltration or haemodialysis or haemodiafiltration of a second fluid.

17. (Withdrawn) The filter device of claim 1, wherein said device comprises a housing within which are arranged at least three filtration compartments and wherein at least one of said filtration compartments is suitable for carrying out ultrafiltration of a first fluid while each of the other compartments is suitable for simultaneously carrying out either haemofiltration or haemodialysis or haemodiafiltration of a second fluid.

18. (Withdrawn) The filter device of Claim 17, wherein said first surfaces of at least two of said filter membranes in separate filtration compartments are in fluid flow communication.

19. (Original) The filter device of Claim 1, wherein said second surfaces of said filter membrane of one of said filtration compartments are in fluid communication with said first surface of said filter membrane in another of said filtration compartments.

20. (Original) The filter device of Claim 19, wherein said first surface of said filter membrane of one said filtration compartments is in fluid communication with said second surfaces of said filter membrane in another of said filtration compartments via an external fluid flow port.

21. (Original) The filter device of Claim 1, wherein said filter membrane comprises a bundle of semi-permeable hollow-fibre membranes and wherein said first surface is comprised of the interior surfaces of said hollow-fibres in said bundle and wherein said second surface is comprised of the exterior surfaces of said hollow-fibres in said bundle.

22. (Original) The filter device of Claim 21, wherein said housing comprises two opposed ends and a tubular external wall therebetween, said hollow-fibre membranes being arranged within each of said filtration compartments along the longitudinal direction of said tubular housing, wherein the ends of said hollow fibre membranes are secured by and embedded within a potting compound.

23. (Original) The filter device of Claim 22, wherein an end-cap is fixed to each end of the tubular housing and wherein a header chamber is provided between each said end–cap and the ends of said hollow fibres.

24. (Original) The filter device of Claim 23, wherein said external wall of said tubular housing is provided at its ends with engagement portions for positively engaging said potting compound.

25. (Withdrawn) The filter device of claim 1, wherein said longitudinally extending shell portions are welded together.

26. (Withdrawn) The filter device of claim 25, wherein said longitudinally extending shell portions are laser welded.

27. (Withdrawn) The filter device of claim 25, wherein said longitudinally extending shell portions are ultrasound welded.

28. (Withdrawn) A filter device comprising a housing, said housing enclosing at least two fluid filtration compartments, each filtration compartment comprising at least one filter membrane having a first surface and a second surface, said first surface of each filter membrane

being in fluid communication with at least one fluid flow port, said second surface being in fluid communication with at least one fluid flow port, adjacent filtration compartments being separated from each other by an internal wall, said housing comprising at least two longitudinally extending shell portions, wherein at least one filtration compartment comprises at least two spaced apart generally planar walls and said walls are in a parallel relationship to each other.

29. (Withdrawn) The filter device of Claim 28 wherein each filtration compartment comprises at least two spaced apart generally parallel walls and said walls are in a parallel relationship with each other.

30. (Withdrawn) The filter device of Claim 29 wherein said filter device comprises three filtration compartments.

31. (Withdrawn) A method of making a filter device comprising the steps of

forming a housing for enclosing at least two fluid filtration compartments, said housing comprising at least two longitudinally extending shell portions, one of said longitudinally extending shell portions of the housing describing less than one half of the perimeter of said housing, adjacent filtration compartments being separated from each other by an internal wall,

placing at least one filter membrane having a first surface and a second surface longitudinally in each filtration compartment;

closing said shell portions around said filter membranes to form said fluid filtration compartments;

sealing adjacent edges of said shell portions;

imbedding ends of said filter membranes in a potting compound; and

capping the ends of said housing.

32. (Withdrawn) The method of Claim 31, further comprising providing at least two spaced apart generally planar walls in each fluid filtration compartment, said walls being in a parallel relationship to each other and packing a plurality of filter membranes between said walls.

33. (Withdrawn) The method of Claim 32, further comprising

forming one of said longitudinally extending shell portions from a substantially clear, uncoloured material at at least a boundary thereof,

forming another of said longitudinally extending shell portions of a coloured material at at least a boundary of said another shell portion, and

wherein said step of sealing adjacent edges comprises differential heating of said colored material and said uncoloured material by laser or electromagnetic radiation.

34. (Withdrawn) The method of Claim 32, further comprising

forming one of said longitudinally extending shell portions from a first material having a first refractive index and

forming another of said longitudinally extending shell portions from a second material having a second refractive index, said first refractive index being different from said second refractive index, and

wherein said step of sealing adjacent edges comprises differential heating of said first material and said second material by laser or electromagnetic radiation.

35. (Withdrawn) The method of Claim 34 comprising

forming said one of said longitudinally extending shell portions from polycarbonate, and

forming said another of said longitudinally extending shell portions from polypropylene.

36. A filter device comprising

a housing, said housing having

at least two longitudinally extending shell portions

one of said longitudinally extending shell portions having a first optical property and

another of said shell portions having a second optical property, said first optical property being different from said second optical property,

at least one filter membrane disposed within said housing and extending longitudinally from a first end to a second end of said housing,

end caps closing said ends of said housing, and

at least one access port for introducing fluid into or out of said filter device.

37. (Withdrawn) The filter device of claim 36 wherein said optical property is colour.

38. (Original) The filter device of claim 36 wherein said optical property is a refractive index.

39. (Original) The filter device of Claim 38 wherein said one of said longitudinally extending shell portions is comprised of polycarbonate and said another of said longitudinally extending shell portions is comprised of polypropylene.

40. (Withdrawn) The filter device of claim 36, wherein said longitudinally extending shell portions are welded together.

41. (Withdrawn) The filter device of claim 40, wherein said longitudinally extending shell portions are laser welded.

42. (Withdrawn) The filter device of claim 40, wherein said longitudinally extending shell portions are ultrasound welded.

43. (Withdrawn) The filter device of claim 36 wherein said housing further comprises an internal wall, said wall separating said housing into first and second compartments, said wall having

a first wall portion extending from said one of said longitudinally extending shell portions and having said first refractive index and

a second wall portion extending from said another of said longitudinally extending shell portions and having said second refractive index, said first wall portion being welded to said second wall portion.